

What is claim d is:

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1. A coating composition consisting of at least four components, comprising
- (I) a component comprising at least one oligomeric or polymeric resin containing functional groups which react with isocyanate groups, as binder (A),
- (II) a component comprising at least one polyisocyanate as crosslinking agent (F),
- (III) a component which comprises water and is substantially free from acrylate copolymers (A) dispersed or dissolved therein, and
- (IV) a finely divided solid component which comprises at least one water-soluble or -dispersible finely divided solid acrylate copolymer (A).
2. A process for producing a coating from a coating composition consisting of at least four components by mixing of the components, application of the resulting coating composition to the surface that

is to be coated, and curing of the resulting wet film, which comprises

- 1) mixing at least one component (I) comprising at least one oligomeric or polymeric resin containing functional groups which react with isocyanate groups, as binder (A), with at least one component (II) comprising at least one polyisocyanate as crosslinking agent (F), to give the mixture (I/II);
- 2) mixing at least one component (III) which comprises water and is substantially free from acrylate copolymers (A) dissolved or dispersed therein with at least one finely divided solid component (IV) which comprises at least one water-soluble or -dispersible, finely divided solid acrylate copolymer (A), to give the mixture (III/IV); and then either
- 3) dispersing and/or dissolving the mixture (I/II) in the mixture (III/IV) or
- 4) dispersing and/or dissolving the mixture (III/IV) in the mixture (I/II), to give
- 5) the coating composition (I/II/III/IV).

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3. The coating composition as claimed in claim 1 or the process as claimed in claim 2, wherein the finely divided solid component (IV) is preparable by spray-drying or freeze-drying of solutions, emulsions or dispersions of the acrylate copolymers (A) or precipitation of acrylate copolymers (A) from their solution, dispersion or emulsion, by emulsion polymerization or precipitation polymerization of the acrylate copolymers (A) or by grinding of the acrylate copolymers (A).
4. The coating composition as claimed in claim 1 or 3 or the process as claimed in claim 2 or 3, wherein the functional groups which react with isocyanate groups comprise hydroxyl groups.
5. The coating composition as claimed in any of claims 1, 3 and 4 or the process as claimed in any of claims 2 to 4, wherein component (III) comprises at least one binder (A).
6. The coating composition as claimed in any of claims 1 and 3 to 5 or the process as claimed in any of claims 2 to 5, wherein component (I) comprises at least one water-soluble or -dispersible binder (A) and/or component (III) comprises at least one water-dissolved or water-dispersed binder (A).

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7. The coating composition or the process as claimed in claim 6, wherein the binders (A) comprise alternatively

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(i) functional groups which can be converted into cations by neutralizing agents and/or quaternizing agents, and/or cationic groups, especially sulfonium groups,

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or

(ii) functional groups which can be converted into anions by neutralizing agents, and/or anionic groups, especially carboxylic acid and/or carboxylate groups,

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and/or

(iii) nonionic hydrophilic groups, especially poly(alkylene ether) groups.

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8. The coating composition or the process as claimed in claim 7, wherein the binders (A) contain carboxylic acid and/or carboxylate groups (ii).

- 25 9. The coating composition or the process as claimed in claim 8, wherein component (I) comprises as binders (A)

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(A1) at least one acrylate copolymer (A1) which is dispersible or soluble in one or more organic, optionally water-dilutable solvents, contains hydroxyl groups and carboxylic acid and/or carboxylate groups, and has a number average molecular weight M_n of between 1000 and 30,000 daltons, an OH number of from 40 to 200 mg KOH/g, and an acid number of from 5 to 150 mg KOH/g, and/or

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(A2) at least one polyester resin (A2) which is dispersible or soluble in one or more organic, optionally water-dilutable solvents, contains hydroxyl groups and carboxylic acid and/or carboxylate groups, and has a number average molecular weight M_n of between 1000 and 30,000 daltons, an OH number of from 30 to 250 mg KOH/g, and an acid number of from 5 to 150 mg KOH/g, and/or

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(A3) at least one polyurethane resin (A3) which is dispersible or soluble in one or more organic, optionally water-dilutable solvents, contains hydroxyl groups and carboxylic acid and/or carboxylate groups, and has a number average molecular weight M_n of between 1000 and 30,000 daltons, an OH number of from 20 to 200 mg KOH/g, and an acid number of from 5 to 150 mg KOH/g;

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component (III) comprises as binders (A) the polyester resins (A2) and/or polyurethane resins (A3), and component (IV) comprises as binder (A) the acrylate copolymer (A1).

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10. The coating composition as claimed in any of claims 1 and 3 to 9 or the process as claimed in any of claims 2 to 10, wherein some of the binders (A) in component (III) are in powder slurry particles.

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11. The use of the coating composition as claimed in any of claims 1 and 3 to 10 or of the process as claimed in any of claims 2 to 10 in automotive OEM finishing, refinish, especially automotive refinish, coating of plastics, as topcoat materials and/or primer-surfacers.

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12. An automotive OEM finish or automotive refinish, coating on plastic, topcoat, or primer-surfacer coat, producible from a coating composition as claimed in any of claims 1 and 3 to 11 and/or with the aid of the process as claimed in any of claims 2 to 11.

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13. An article, especially automobile, comprising an automotive OEM finish or automotive refinish,

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coating on plastic, topcoat and/or primer-surfacer
coat as claimed in claim 12.

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